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HCT

TEST REPORT

EMI Test for FCC Certification of NVT-T15M Model

APPLICANT

Novatech Co.,Ltd.

REPORT NO.

HCT-EM-2105-FC004

DATE OF ISSUE

May 26, 2021

Tested by

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TEST REPORT

EMI Test for
FCC Certification

REPORT NO.
HCT-EM-2105-FC004

DATE OF ISSUE
May 26, 2021

FCC ID.
2AZTP-NVT-T15M

Applicant **Novatech Co.,Ltd.**
11st floor, U-TOWER, 120, Heungdeok Jungang-ro, Giheung-gu Yongin-si
Gyeonggi-do 16950 South Korea

Product Name Wireless Charger
Model Name NVT-T15M

Date of Test May 04, 2021 / May 10, 2021

Test Standard Used FCC CFR 47 PART 15 Subpart B Class B
ANSI C63.4-2014

Test Results Refer to the present document

Manufacturer Novatech Co.,Ltd.

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

This test results were applied only to the test methods required by the standard.



REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	May 26, 2021	Initial Release

The above Test Report is not related to the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme) / A2LA(American Association for Laboratory Accreditation), which signed the ILAC-MRA.

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CONTENTS

1. GENERAL INFORMATION	5
1.1 Description of EUT	5
1.2 Tested System Details	5
1.3 Cable Description	5
1.4 Noise Suppression Parts on Cable. (I/O Cable)	6
1.5 Test Facility	7
1.6 Calibration of Measuring Instrument	7
1.7 Measurement Uncertainty	7
2. DESCRIPTION OF TEST	8
2.1 Measurement of Conducted Emission	8
2.2 Measurement of Radiated Emission	9
2.3 Configuration of Tested System	10
3. PRELIMINARY TEST	11
3.1 Conducted Emission	11
3.2 Radiated Emission	11
4. EMISSION TEST SUMMARY	12
4.1 Conducted Emission	12
4.2 Radiated Emission Below 1 GHz	21
4.3 Radiated Emission Above 1 GHz (Not Applicable)	23
5. CONCLUSION	25
6. APPENDIX A. TEST SETUP PHOTOGRAPHS	26



1. GENERAL INFORMATION

1.1 Description of EUT

The EUT is Wireless Charger.

FCC ID	2AZTP-NVT-T15M
Product Name	Wireless Charger
Model Name	NVT-T15M
Frequency Range	110 kHz to 148 kHz
Clock	24 MHz
Power Supply Voltage	DC 5 V, DC 9 V
	Travel adaptor (EP-TA800): Type: C to C
	Power Data Objective (PDO): 5 V (3 A), 9 V (2.77 A) Programmable Power Supply (PPS): 3.3 – 5.9 V (3 A), 3.3 – 11 V (2.25 A)
Manufacturer	Novatech Co.,Ltd.

1.2 Tested System Details

All equipment descriptions used in the tested system (including inserted cards) are:

Device Type	Model Name	Serial Number	Manufacturer
EUT	NVT-T15M	-	Novatech
Travel Adapter	EP-TA800	-	SAMSUNG
JIG	-	-	Novatech
5 V LOADER	-	-	Novatech
9 V LOADER	-	-	Novatech

NOTE. The peripheral device adapter is a wall type



1.3 Cable Description

Product Name	Port	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (m)
EUT	DC IN	N	N/A	(P)1.2
Adapter	DC OUT	N	N/A	(P)1.2
	AC IN	N	N/A	(P)-

"(D)" Data Cable, "(P)" Power Cable

1.4 Noise Suppression Parts on Cable (I/O Cable)

Product Name	Port	Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
EUT	DC IN	N	N/A	Y	EUT End
Adapter	DC OUT	N	N/A	Y	EUT End
	AC IN	N	N/A	N	N/A

1.5 Test Facility

Test site is located at 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Rep. of Korea.
Those measurement facilities are constructed in conformance with the requirements of ANSI C63.4-2014.
The Normalized site attenuations (30 MHz to 1 GHz) and Site validation (1 GHz to 18 GHz) were performed in accordance with the standard in ANSI C63.4-2014
This testing laboratories are accredited and accordance with the recognized international Standard ISO/IEC 17025:2017. (KOLAS, Accreditation No. KT197)

1.6 Calibration of Measuring Instrument

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturers recommendations for utilizing calibration equipment, which is traceable to recognized national standards. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5:2017

1.7 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Test Item	Test Site (Chamber)	Expanded Uncertainty
Conducted Emission (0.15 MHz to 30 MHz)	EMI Shield Room	1.6 dB
Radiated Emission (30 MHz to 1 GHz)	3 m Semi Anechoic Chamber #2	5.6 dB



2. DESCRIPTION OF TEST

2.1 Measurement of Conducted Emission

The test procedure was in accordance with ANSI C63.4-2014, Clause 7.3

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN).
If the EUT is connected to the PC through USB, the AC power-line adapter of the PC is directly connected to a line impedance stabilization network (LISN).
Other support units were connected to the power mains through another LISN.
The two LISNs provide $50\ \Omega$ / $50\ \mu\text{H}$ of coupling impedance for the measuring instrument.
- b. Both conducted lines are measured in Quasi-Peak and Average mode, including the worst-case data points for each tested configuration.
- c. The frequency range from 150 kHz to 30 MHz was searched.

[Conducted Emission Limits]

FCC Part15 Subpart B

Frequency (MHz)	Class A		Class B	
	Quasi-Peak (dB μV)	Average (dB μV)	Quasi-Peak (dB μV)	Average (dB μV)
0.15 to 0.5	79	66	66 to 56*	56 to 46*
0.5 to 5	73	60	56	46
5 to 30	73	60	60	50

[*] Decreases with the logarithm of the frequency.

2.2 Measurement of Radiated Emission

The test procedure was in accordance with ANSI C63.4-2014, Clause 8.3

- The EUT was placed on the top of a turn table 0.8 meters above the ground at a semi-anechoic chamber.
The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 m away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from 1 m to 4 m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 m to 4 m and the turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Quasi-Peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- The test-receiver system was set to Peak and Average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
- Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. (1 GHz to 40 GHz)

[Radiated Emission Limits]

FCC Part15 Subpart B

Frequency (MHz)	Class A			Class B		
	Antenna Distance (m)	Field Strength ($\mu V/m$)	Quasi-Peak (dB $\mu V/m$)	Antenna Distance (m)	Field Strength ($\mu V/m$)	Quasi-Peak (dB $\mu V/m$)
30 to 88	10	90	39.0	3	100	40.0
88 to 216	10	150	43.5	3	150	43.5
216 to 960	10	210	46.4	3	200	46.0
Above 960	10	300	49.5	3	500	54.0
Frequency (MHz)	Antenna Distance (m)	Class A		Class B		
		Peak (dB $\mu V/m$)	Average (dB $\mu V/m$)	Peak (dB $\mu V/m$)	Average (dB $\mu V/m$)	
Above 1 000	3	80	60	74	54	

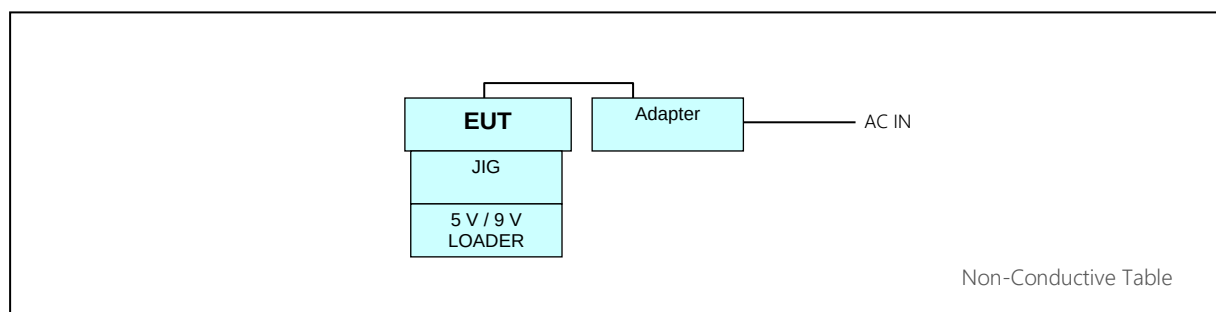
2.2.1 Frequency Range of Radiated Measurements

An unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a Radiated Emission limit is specified, up to the frequency shown in the following table

FCC Part15 Subpart B

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705 to 108	1 000
108 to 500	2 000
500 to 1 000	5 000
Above 1 000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

2.3 Configuration of Tested System





3. PRELIMINARY TEST

3.1 Conducted Emission

It was tested the following operating mode, after connecting all peripheral devices.

Operating Modes: Charging 5 V mode
Charging 9 V mode

3.2 Radiated Emission

It was tested the following operating mode, after connecting all peripheral devices.

Radiated Emission Below 1 GHz

Operating Modes: Charging 5 V mode
Charging 9 V mode

Radiated Emission Above 1 GHz

Operating Modes: Not applicable



4. CONDUCTED EMISSION AND RADIATED EMISSION TEST SUMMARY

4.1 Conducted Emission

4.1.1 Measuring instruments

Type	Model Name	Manufacturer	Serial Number	Calibration Cycle	Calibration Date
☒ EMI test receiver	ESR7	Rohde & Schwarz	101910	1 year	09.16.2020
☒ LISN	ENV216	Rohde & Schwarz	102245	1 year	09.04.2020
☐ LISN	ENV216	Rohde & Schwarz	100073	1 year	04.07.2021
☒ Software	EMC32	Rohde & Schwarz	-	-	-

4.1.2 Operating Condition

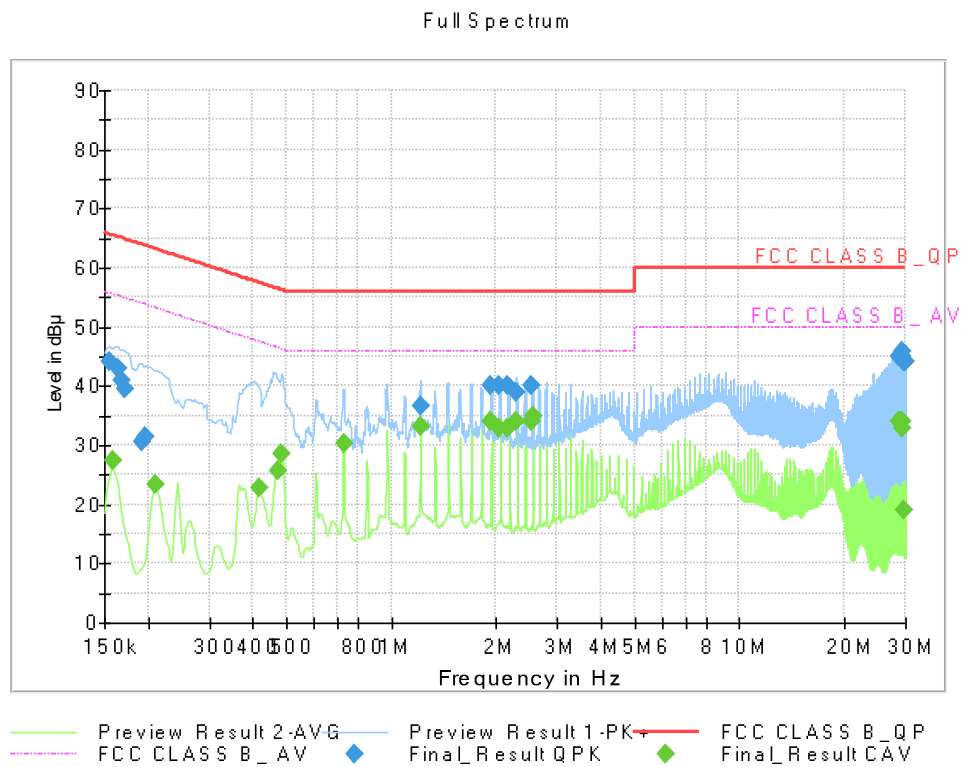
The test results of conducted emission at mains ports provide the following information:

Test Standard Used	FCC CFR 47 PART 15 Subpart B Class B ANSI C63.4-2014
Frequency Range	0.15 MHz to 30 MHz
Detector	Quasi-Peak, CISPR-Average
Bandwidth	9 kHz (6 dB)
Test Site	EMI Shield Room
Temperature	22.8 °C
Relative Humidity	46.7 %
Test Date	May 04, 2021

- Calculation Formula:
1. Conductor L1 = Hot, Conductor N = Neutral
 2. Corr. = LISN Factor + Cable Loss
 3. QuasiPeak or CAverage= Receiver Reading + Corr.
 4. Margin = Limit – QuasiPeak or CAverage

4.1.3 Measuring Data

Figure 1: Conducted Emission (150 kHz to 30 MHz), Charging 5 V mode, Line (L1)





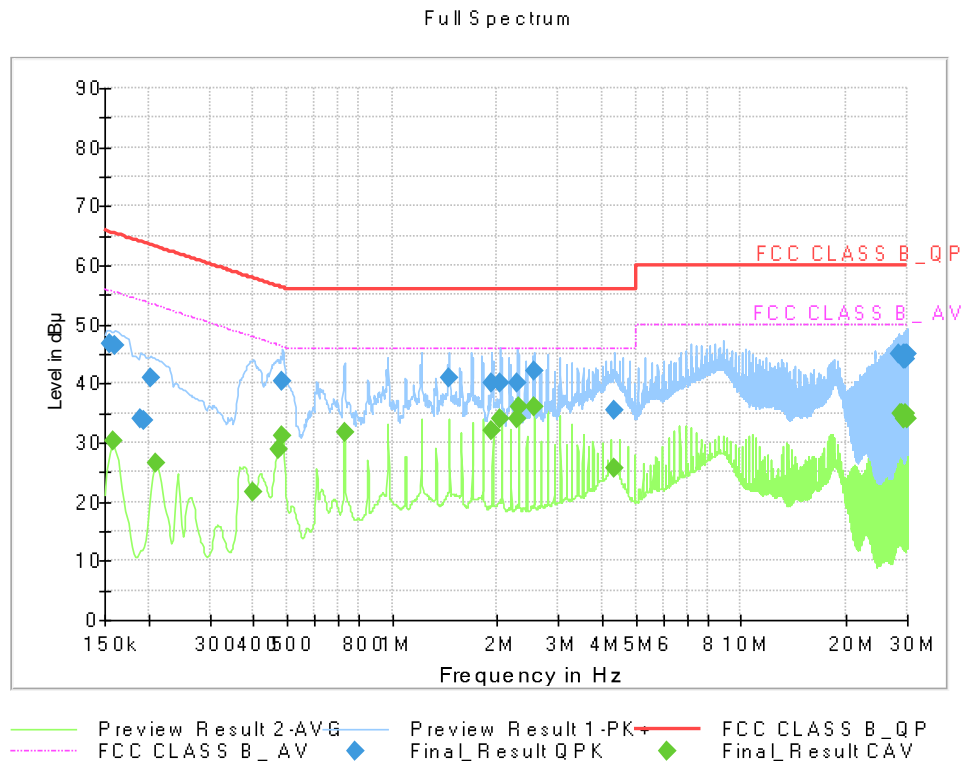
QuasiPeak Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1545	44.20	65.75	21.55	9.000	L1	9.6
0.1635	43.04	65.28	22.25	9.000	L1	9.6
0.1680	41.01	65.06	24.05	9.000	L1	9.6
0.1725	39.60	64.84	25.24	9.000	L1	9.6
0.1928	30.60	63.92	33.32	9.000	L1	9.6
0.1973	31.44	63.73	32.29	9.000	L1	9.6
1.2133	36.55	56.00	19.45	9.000	L1	9.7
1.9243	23.90	56.00	32.10	9.000	L1	9.7
2.0435	31.06	56.00	24.94	9.000	L1	9.7
2.1628	28.97	56.00	27.03	9.000	L1	9.7
2.2843	22.69	56.00	33.31	9.000	L1	9.7
2.5250	30.06	56.00	25.94	9.000	L1	9.8
28.7308	33.95	60.00	26.05	9.000	L1	10.7
28.9715	33.73	60.00	26.27	9.000	L1	10.7
29.2123	34.49	60.00	25.51	9.000	L1	10.7
29.4530	34.32	60.00	25.68	9.000	L1	10.7
29.6915	33.23	60.00	26.77	9.000	L1	10.7
29.9323	32.26	60.00	27.74	9.000	L1	10.7

CAverage Final Result

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1590	27.31	55.52	28.21	9.000	L1	9.6
0.2108	23.40	53.18	29.78	9.000	L1	9.6
0.4155	22.66	47.54	24.88	9.000	L1	9.6
0.4718	25.80	46.48	20.69	9.000	L1	9.6
0.4853	28.66	46.25	17.59	9.000	L1	9.6
0.7295	30.32	46.00	15.68	9.000	L1	9.7
1.2133	33.22	46.00	12.78	9.000	L1	9.7
1.9243	18.96	46.00	27.04	9.000	L1	9.7
2.0435	19.92	46.00	26.08	9.000	L1	9.7
2.1628	16.53	46.00	29.47	9.000	L1	9.7
2.2843	18.52	46.00	27.48	9.000	L1	9.7
2.5250	18.87	46.00	27.13	9.000	L1	9.8
2.5498	34.78	46.00	11.22	9.000	L1	9.8
28.7308	14.44	50.00	35.56	9.000	L1	10.7
28.9715	19.11	50.00	30.89	9.000	L1	10.7
29.2100	15.94	50.00	34.06	9.000	L1	10.7
29.4508	12.62	50.00	37.38	9.000	L1	10.7
29.6915	18.92	50.00	31.08	9.000	L1	10.7

Figure 2: Conducted Emission (150 kHz to 30 MHz), Charging 5 V mode, Line (N)





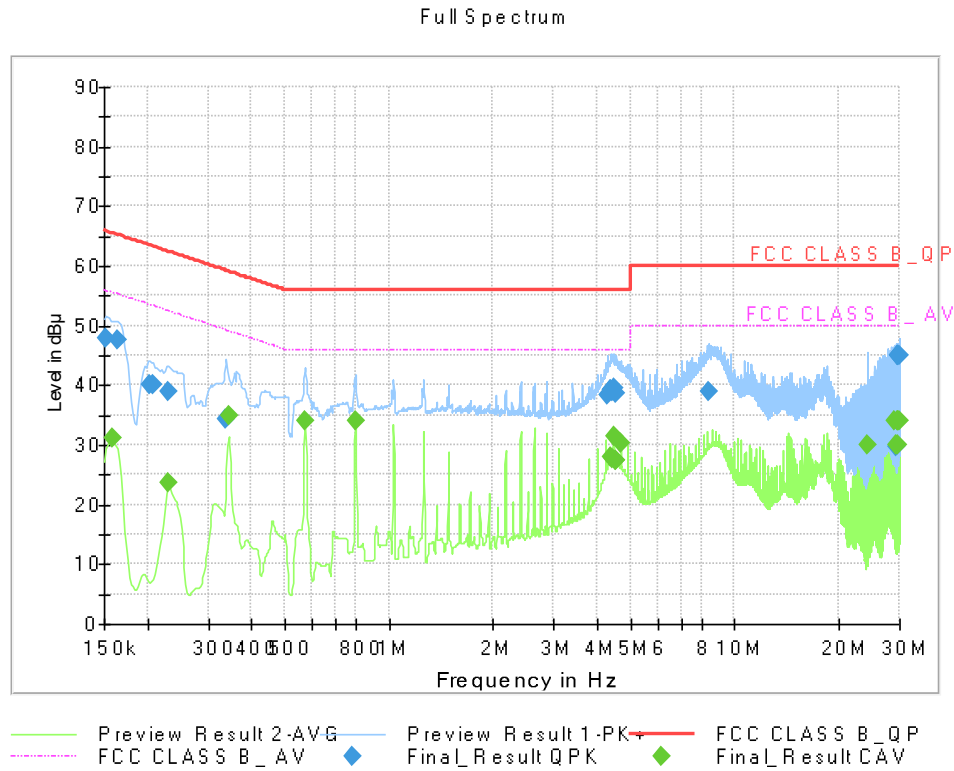
QuasiPeak Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1545	46.69	65.75	19.06	9.000	N	9.6
0.1613	46.46	65.40	18.94	9.000	N	9.6
0.1905	33.96	64.02	30.05	9.000	N	9.6
0.1950	33.74	63.82	30.08	9.000	N	9.6
0.2040	41.06	63.45	22.38	9.000	N	9.6
0.4853	40.37	56.25	15.88	9.000	N	9.6
1.4585	41.08	56.00	14.92	9.000	N	9.7
1.9243	33.56	56.00	22.44	9.000	N	9.7
2.0435	33.82	56.00	22.18	9.000	N	9.7
2.2843	33.83	56.00	22.17	9.000	N	9.7
2.5498	42.03	56.00	13.97	9.000	N	9.8
4.3295	35.39	56.00	20.61	9.000	N	9.8
28.4945	20.97	60.00	39.03	9.000	N	10.9
29.2145	36.70	60.00	23.30	9.000	N	10.9
29.4553	34.05	60.00	25.95	9.000	N	10.9
29.6915	21.02	60.00	38.98	9.000	N	10.9
29.6960	20.41	60.00	39.59	9.000	N	10.9
29.9368	39.16	60.00	20.84	9.000	N	10.9

CAverage Final Result

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1590	30.21	55.52	25.31	9.000	N	9.6
0.2108	26.52	53.18	26.66	9.000	N	9.6
0.3998	21.71	47.86	26.14	9.000	N	9.6
0.4718	28.73	46.48	17.75	9.000	N	9.6
0.4853	31.15	46.25	15.10	9.000	N	9.6
0.7295	31.68	46.00	14.32	9.000	N	9.6
1.9243	21.11	46.00	24.89	9.000	N	9.7
2.0435	22.11	46.00	23.89	9.000	N	9.7
2.2843	19.38	46.00	26.62	9.000	N	9.7
2.3068	35.94	46.00	10.06	9.000	N	9.7
2.5498	35.96	46.00	10.04	9.000	N	9.8
4.3295	25.53	46.00	20.47	9.000	N	9.8
28.7330	13.34	50.00	36.66	9.000	N	10.9
28.9738	16.30	50.00	33.70	9.000	N	10.9
29.2145	17.83	50.00	32.17	9.000	N	10.9
29.4553	13.22	50.00	36.78	9.000	N	10.9
29.6960	18.83	50.00	31.17	9.000	N	10.9
29.9368	19.16	50.00	30.84	9.000	N	10.9

Figure 3: Conducted Emission (150 kHz to 30 MHz), Charging 9 V mode, Line (L1)





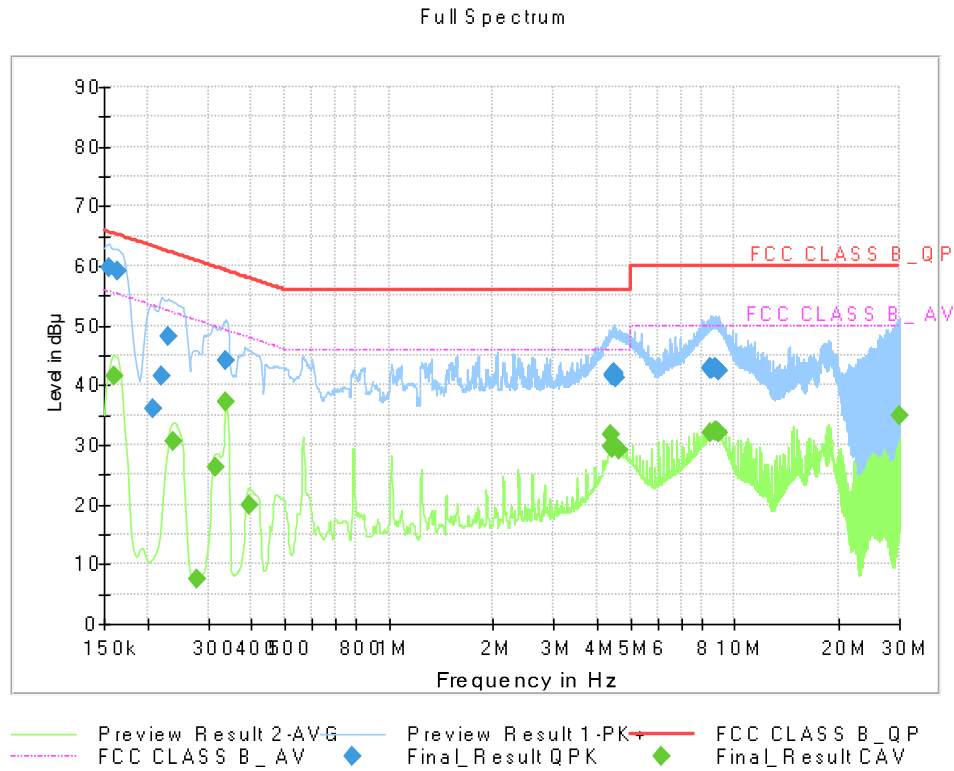
QuasiPeak Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1523	47.82	65.88	18.06	9.000	L1	9.6
0.1635	47.71	65.28	17.58	9.000	L1	9.6
0.2040	14.15	63.45	49.30	9.000	L1	9.6
0.2085	24.77	63.27	38.50	9.000	L1	9.6
0.2310	38.85	62.41	23.56	9.000	L1	9.6
0.3390	34.40	59.23	24.82	9.000	L1	9.6
4.3048	38.29	56.00	17.71	9.000	L1	9.8
4.3880	39.18	56.00	16.82	9.000	L1	9.8
4.4015	39.09	56.00	16.91	9.000	L1	9.8
4.4465	39.04	56.00	16.96	9.000	L1	9.8
4.4578	39.66	56.00	16.34	9.000	L1	9.8
4.5320	38.71	56.00	17.29	9.000	L1	9.9
8.4583	39.01	60.00	20.99	9.000	L1	10.0
29.3338	29.65	60.00	30.35	9.000	L1	10.7
29.5610	18.67	60.00	41.33	9.000	L1	10.7
29.6983	18.77	60.00	41.23	9.000	L1	10.7
29.7883	19.29	60.00	40.71	9.000	L1	10.7
29.9278	20.30	60.00	39.70	9.000	L1	10.7

CAverage Final Result

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1590	31.26	55.52	24.26	9.000	L1	9.6
0.2310	23.70	52.41	28.71	9.000	L1	9.6
0.3435	34.89	49.12	14.23	9.000	L1	9.6
0.5720	19.36	46.00	26.64	9.000	L1	9.6
0.8015	15.37	46.00	30.63	9.000	L1	9.7
4.3655	27.97	46.00	18.03	9.000	L1	9.8
4.4420	27.64	46.00	18.36	9.000	L1	9.8
4.4600	31.31	46.00	14.69	9.000	L1	9.8
4.5140	27.45	46.00	18.55	9.000	L1	9.9
4.5298	27.28	46.00	18.72	9.000	L1	9.9
4.6873	30.21	46.00	15.79	9.000	L1	9.9
24.2420	30.07	50.00	19.93	9.000	L1	10.5
29.0188	11.75	50.00	38.25	9.000	L1	10.7
29.3338	13.45	50.00	36.55	9.000	L1	10.7
29.5610	18.07	50.00	31.93	9.000	L1	10.7
29.7005	14.13	50.00	35.87	9.000	L1	10.7
29.7883	14.35	50.00	35.65	9.000	L1	10.7
29.9278	15.17	50.00	34.83	9.000	L1	10.7

Figure 4: Conducted Emission (150 kHz to 30 MHz), Charging 9 V mode, Line (N)



QuasiPeak Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1545	59.72	65.75	6.04	9.000	N	9.6
0.1635	59.06	65.28	6.22	9.000	N	9.6
0.2085	36.19	63.27	27.07	9.000	N	9.6
0.2198	41.63	62.83	21.20	9.000	N	9.6
0.2288	48.05	62.50	14.44	9.000	N	9.6
0.3390	44.06	59.23	15.16	9.000	N	9.6
4.4128	41.71	56.00	14.29	9.000	N	9.9
4.4488	41.55	56.00	14.45	9.000	N	9.9
4.4578	41.84	56.00	14.16	9.000	N	9.9
4.4780	42.01	56.00	13.99	9.000	N	9.9
4.4938	41.82	56.00	14.18	9.000	N	9.9
4.5118	41.37	56.00	14.64	9.000	N	9.9
8.4718	42.87	60.00	17.13	9.000	N	10.0
8.5078	42.79	60.00	17.21	9.000	N	10.0
8.5730	42.75	60.00	17.25	9.000	N	10.0
8.8205	43.06	60.00	16.94	9.000	N	10.1
8.8858	42.75	60.00	17.25	9.000	N	10.1
8.9555	42.36	60.00	17.64	9.000	N	10.1

CAverage Final Result

Frequency (MHz)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Bandwidth (kHz)	Line	Corr. (dB)
0.1613	41.65	55.40	13.75	9.000	N	9.6
0.2378	30.49	52.17	21.69	9.000	N	9.6
0.2783	7.62	50.87	43.25	9.000	N	9.6
0.3165	26.26	49.80	23.54	9.000	N	9.6
0.3390	37.13	49.23	12.10	9.000	N	9.6
0.3953	19.80	47.95	28.15	9.000	N	9.6
4.3858	29.83	46.00	16.17	9.000	N	9.9
4.4060	31.87	46.00	14.13	9.000	N	9.9
4.4285	29.48	46.00	16.52	9.000	N	9.9
4.4510	29.81	46.00	16.19	9.000	N	9.9
4.4735	30.06	46.00	15.94	9.000	N	9.9
4.6108	29.26	46.00	16.74	9.000	N	9.9
8.5078	31.97	50.00	18.03	9.000	N	10.0
8.7733	32.29	50.00	17.71	9.000	N	10.0
8.8138	32.27	50.00	17.73	9.000	N	10.1
8.8858	32.24	50.00	17.76	9.000	N	10.1
8.9555	32.13	50.00	17.87	9.000	N	10.1
29.8895	17.76	50.00	32.24	9.000	N	10.9

4.2 Radiated Emission Below 1 GHz

4.2.1 Measuring instruments

Type	Model Name	Manufacturer	Serial Number	Calibration Cycle	Calibration Date
☒ EMI test receiver	ESU40	Rohde & Schwarz	100361	1 year	09.25.2020
☒ Bilog antenna	VULB9168	Schwarzbeck	01156	2 year	05.30.2020
☒ Antenna Master	MA4640-XP-ET	INNCO SYSTEM	-	-	-
☒ Antenna Master Controller	CO3000	INNCO SYSTEM	CO3000/1250 /4892320/P	-	-
☒ Turn Table	DS2000-S	INNCO SYSTEM	-	-	-
☒ Turn Table Controller	CO2000	INNCO SYSTEM	CO3000/1250 /4892320/P	-	-
☒ Software	EMC32	Rohde & Schwarz	-	-	-

4.2.2 Operating Condition

The test results of radiated emission provide the following information:

Used Test Standard	FCC CFR 47 PART 15 Subpart B Class B ANSI C63.4-2014
Frequency Range	30 MHz to 1 000 MHz
Detector	Quasi-Peak
Bandwidth	120 kHz (6 dB)
Clock	24 MHz
Test Site	3 m Semi Anechoic Chamber #2
Temperature	22.6 °C
Relative Humidity	43.1 %
Test Date	May 10, 2021

-Calculation Formula:

1. POL. H = Horizontal, POL. V = Vertical
2. QuasiPeak = Reading (Receiver Reading) + Corr.
3. Corr. (Correction Factor) = Antenna Factor + Cable Loss
4. Margin = Limit - QuasiPeak



4.2.3 Measuring Data

Charging 5 V mode

Frequency (MHz)	Quasi Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)
55.9110	30.67	40.00	9.33	100.0	V	158.0	19.6
60.1710	31.51	40.00	8.49	100.0	V	237.0	19.4
119.9990	32.79	43.50	10.71	100.0	V	224.0	17.3
144.0150	32.41	43.50	11.09	100.0	V	244.0	19.6
185.8320	30.40	43.50	13.10	100.0	V	204.0	17.9
370.0250	35.02	46.00	10.98	100.0	H	-20.0	22.0

Charging 9 V mode

Frequency (MHz)	Quasi Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)
59.7430	31.00	40.00	9.00	117.4	V	247.0	19.5
61.6180	30.60	40.00	9.40	100.0	V	334.0	19.2
120.0960	31.61	43.50	11.89	100.0	V	250.0	17.3
144.0150	31.18	43.50	12.32	100.0	V	262.0	19.6
191.9100	32.24	43.50	11.26	100.0	V	177.0	17.3
370.1570	34.25	46.00	11.75	100.0	H	334.0	22.0

4.3 Radiated Emission Above 1 GHz (Not Applicable)

4.3.1 Measuring instruments

	Type	Model Name	Manufacturer	Serial Number	Calibration Cycle	Calibration Date
☐	EMI test receiver	ESU40	Rohde & Schwarz	100524	1 year	05.10.2021
☐	Antenna master	MA4640-XP-ET	INNCO SYSTEM	-	-	-
☐	Antenna master controller	CO3000	INNCO SYSTEM	CO3000/870/ 35990515/L	-	-
☐	Turn table	1060	INNCO SYSTEM	-	-	-
☐	Turn table controller	CO2000	INNCO SYSTEM	CO2000/095/ 7590304/L	-	-
☐	Low noise amplifier	TK-PA18H	TESTEK	170034-L	1 year	03.02.2021
☐	Horn antenna	BBHA 9120D	Schwarzbeck	01836	1 year	07.23.2020
☐	Software	EMC32	Rohde & Schwarz	-	-	-

4.3.2 Operating Condition

The test results of radiated emission provide the following information:

Used Test Standard	FCC CFR 47 PART 15 Subpart B Class B ANSI C63.4-2014
Detector	Peak mode: Peak (RBW: 1 MHz, VBW: 3 MHz) CISPR-Average mode: Peak (RBW: 1 MHz, VBW: 10 Hz)
Highest Frequency	-
Tested Frequency Range	-
Test Site	3 m Semi Anechoic Chamber #2
Temperature	- °C
Relative Humidity	- %
Test Date	-

- Calculation Formula:
1. POL. H = Horizontal, POL. V = Vertical
 2. Peak or CAverage = Reading (Receiver Reading) + Corr.
 3. Corr. (Correction Factor) = Antenna Factor+ Cable Loss –Amplifier Gain
 4. Margin = Limit - Peak or CAverage



4.3.3 Measuring Data

Frequency (MHz)	Peak (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Frequency (MHz)	CAverage (dBμV/m)	Antenna Height (cm)	POL. (H/V)	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-



5. CONCLUSION

The data collected shows that the **Product Name: Wireless Charger, Model Name: NVT-T15M** complies with §15.107 and §15.109 of the FCC rules



6. APPENDIX A. TEST SETUP PHOTO

Please refer to Appendix. A and test setup photo file no. as follows;

File No.	Date of Issue	Description
HCT-EM-2105-FC004-P	May 26, 2021	Initial Release

End of report